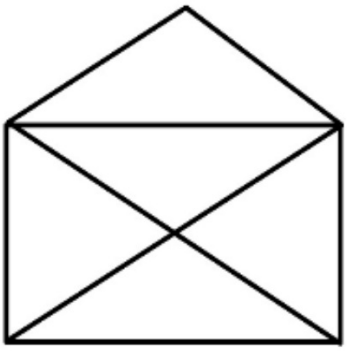
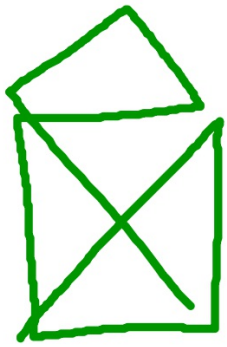
September 16, 2014

1st
2nd

Starter

How many different ways can you trace the image below with one continuous line that doesn't retrace any lines?





9/16 - Multiplying Integers

"Multiplication is repeated addition."

Discuss with your partner why it is true and be ready to share.

Numerical example:

3×2

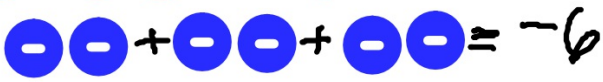
2 sets of 3 added together

3 sets of 2 added together

Integer counters

$3 \times 2 =$ 

$= (+)(+) + (+)(+) + (+)(+) = 6$

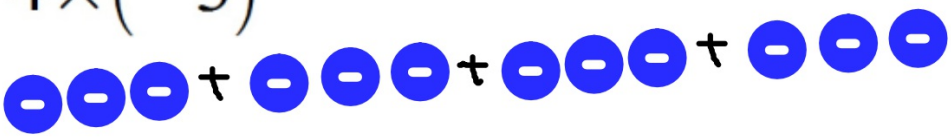
$3 \times (-2) =$ 

$= (-)(-) + (-)(-) + (-)(-) = -6$

$2 \times (-3) =$ 

$= (-)(-)(-) + (-)(-)(-) = -6$

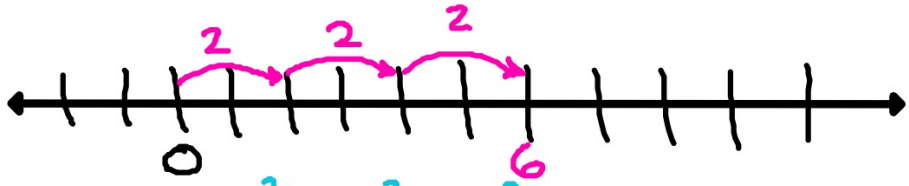
$4 \times (-3) = -12$



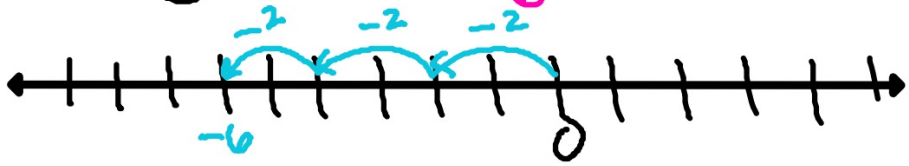
$(-)(-)(-) + (-)(-)(-) + (-)(-)(-) + (-)(-)(-)$

Numberlines

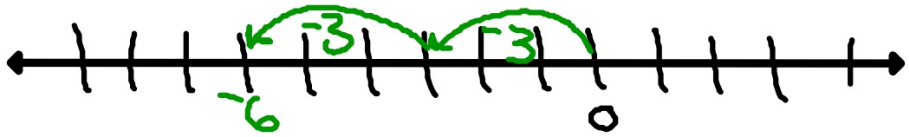
3×2 Sets right



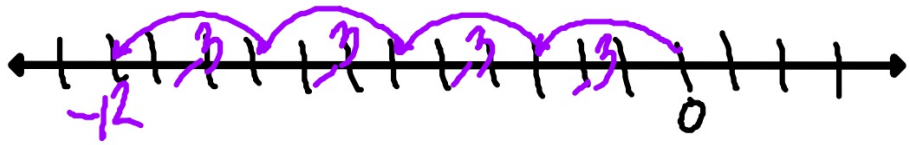
$3 \times (-2)$



$2 \times (-3)$



$4 \times (-3)$



Patterns

Work with a partner. Use a table to find –3 • 2.

Describe the pattern of the products in the table. Then complete the table.

2	•	2	=	4
1	•	2	=	2
0	•	2	=	0
–1	•	2	=	-2
–2	•	2	=	-4
–3	•	2	=	-6

Count down by 1's

Count down by 2's

–3 • 2 = -6

Work with a partner. Use a table to find $-3 \bullet (-2)$.

Describe the pattern of the products in the table. Then complete the table.

-3	$\bullet$	3	$= -9$
-3	$\bullet$	2	$= -6$
-3	$\bullet$	1	$= -3$
-3	$\bullet$	0	$= 0$
-3	$\bullet$	-1	$= 3$
-3	$\bullet$	-2	$= 6$

$-3 \bullet (-2) =$ 6

RULES

Person		Act		
+	×	+	=	+
Batman		$ I m		Good
+	×	-	=	-
Batman		Hit by a truck		Bad
-	×	+	=	-
Joker		$ I m		Bad
-	×	-	=	+
Joker		Hit by a truck		Good

Homework

Yellow - WS5

Due Wednesday